

ABSTRACT OF THE DISCLOSURE

When a sensor of a scanning array is identified as "bad" (defective), data from a neighboring "good" sensor is used to determine pixel data nominally associated with the bad sensor. During a calibration procedure, dark-offset and gain values are determined for each sensor to compensate for individual differences between the sensors of the array. These values are entered into a table in memory. During scanning of an actual image, the values are used to determine digital image pixel data from the signal data provided by the sensors. The calibration procedure also identifies bad sensors, e.g., sensors that remain on or off, irrespective of the illumination incident to them. Extreme offset and gain values are entered into the table locations associated with the respective sensor. When the extreme values are detected, the signal data for the respective sensor is discarded, and the pixel data associated with the most recently processed good sensor is used as the pixel data associated with the bad sensor. Thus, instead of being all white or all dark, pixels associated with a bad sensor match neighboring pixels. Generally, this result is far more acceptable perceptually. Thus, a scanner can have a useful life beyond the failure of one or more sensors of the scanning array.